EPA

United States Environmental Protection Agency
Washington, DC 20460

Work Assignment

Work Assignment Number: 032-ROBE-A245

☐ Other ☐ Amendment Number:

Contract Number	Contract Period	Title of Work Assignment/SF Site Name
EP-W-09-009	03/05/2009 To 03/04/2019 Base Option Period Number 1	New Cassel/Hicksville Ground W

Contractor: HENNINGSON, DURHAM & RICHARDSON P.C.

Specify Section and paragraph of Contract SOW: III.B. Enforcement Support Site

Purpose:
- [X] Work Assignment
- [ ] Work Assignment Amendment
- [ ] Work Plan Approval
- [ ] Work Assignment Close-Out
- [ ] Incremental Funding

Period of Performance: From 05/28/2015 To 09/30/2015

Comments:
The purpose of this action is to initiate a new work assignment under this contract. Attached to this work assignment form is the Statement of Work for this assignment. HDR shall prepare a work plan and budget which will only address Task 1 activities. The initial expenditure limits shall be allocated to Task 1 - Project Planning activities. Option Period Expenditure Limits: 500LOE and $75,000.

[X] Superfund — Accounting and Appropriations Data — [ ] Non-Superfund

Note: To report additional accounting and appropriations date use EPA Form 1900-69A.

SFO (Max 2): ☐

Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										

Authorized Work Assignment Ceiling

	Contract Period	Cost/Fee	LOE
This Action:			
Total:	03/05/2009 To 03/04/2019		

Work Plan / Cost Estimate Approvals

Contractor WP Dated:	Cost/Fee:	LOE:
Cumulative Approved:	Cost/Fee:	LOE:

Work Assignment Manager Name: Jennifer LaPoma (Signature) (Date)		Branch/Mail Code: Phone Number: 212-637-4328 FAX Number:
Project Officer Name: Keith Moncino (Signature) (Date)		Branch/Mail Code: Phone Number: 212-637-4353 FAX Number:
Other Agency Official Name (Signature) (Date)		Branch/Mail Code: Phone Number: FAX Number:
Contracting Official Name: John J. Bachmann Jr. (Signature)	5/28/15 (Date)	Branch/Mail Code: Phone Number: 212-637-3363 FAX Number:

Work Assignment Form. (WebForms V1.0)

STATEMENT OF WORK
REMEDIAL DESIGN OVERSIGHT
NEW CASSEL/HICKSVILLE GROUND WATER CONTAMINATION SITE
OPERABLE UNIT 1
NASSAU COUNTY, NEW YORK

Introduction

This Statement of Work (SOW) is for RAC contractor performance for oversight of the Remedial Design (RD) for Operable Unit 1 (OU1) of the New Cassel/Hicksville Ground Water Contamination Superfund Site (Site), which is being implemented by the Potentially Responsible Parties (PRPs) pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA).

Site Description

The New Cassel/Hicksville Ground Water Contamination Superfund site (Site) comprises a widespread area of groundwater contamination within the Towns of North Hempstead, Hempstead, and Oyster Bay, Nassau County, New York. The Site is currently estimated to include approximately 6.5 square miles that has been characterized by volatile organic compound (VOC) contaminated groundwater that has impacted several water supply wells, including four Town of Hempstead wells (Bowling Green 1 and 2, Roosevelt Field 10, and Levittown 2A), six Hicksville water supply wells (4-2, 5-2, 5-3, 8-1, 8-3, and 9-3), and one Village of Westbury water supply well (11). Analytical results of groundwater samples from the Site have revealed concentrations of VOCs in excess of the EPA's promulgated health-based protective maximum contaminant levels (MCLs), which are enforceable standards for various drinking water contaminants and New York State's standards.

Cleanup of the Site will be addressed in discrete phases or components, and it is anticipated that there will be multiple OUs for the Site. EPA selected an interim remedy for OU1, the area downgradient of the New Cassel Industrial Area (NCIA) and Old Country Road, in a Record of Decision (ROD) signed September 2013. EPA's selected remedy for OU1 includes, among other components, a combination of in-situ treatment of groundwater via in-well vapor stripping and extraction of groundwater via pumping and ex-situ treatment of extracted groundwater prior to discharge to a publically owned treatment works or reinjection to groundwater; and in-situ chemical treatment, as appropriate The remedy selected for OU1 is intended to, among other things; minimize further migration of contaminants (primarily tetrachloroethene, trichloroethene, and 1,1,1-trichloroethane) while an investigation of OU3 is conducted. EPA intends that a Remedial Investigation/Feasibility (RI/FS) for OU3, is an area of groundwater contamination in the far-field area downgradient of OU1, will be conducted concurrently with the OU1 RD. Limited characterization has been conducted within OU3. EPA anticipates that the investigation of OU3 will lead to a remedy selection process that would be consistent with the actions set forth in the ROD for OU1.

Individual facilities within the NCIA are considered to be among the sources of groundwater contamination for OU1 and subsequently OU3. The NCIA was developed for industrial use during the 1950s through the 1970s and remains densely populated with an estimated 200 industrial and commercial properties. Review of Nassau County Department of Health and New York State Department of Environmental Conservation (NYSDEC) reports indicates that leach pools and/or dry wells located on upgradient properties in the NCIA were generally used for disposal of wastewater at these facilities until sewers were installed. Source areas within the NCIA continue to be overseen by NYSDEC under its state hazardous waste cleanup program. The on-going, State-authorized response actions at the NCIA facilities are not part of OU1 and/or OU3, although the successful completion (*i.e.,* source control or cleanup) of addressing the source area(s) at the upgradient individual NCIA facilities, under NYSDEC oversight are anticipated and were assumed in evaluating the potential for attaining the objectives of the selected remedial alternative for OU1.

The U.S. Army Corps of Engineers (ACOE) will be conducting RI/FS activities to characterize contamination at the Sylvania property and downgradient groundwater (OU2) in Hicksville, New York. ACOE is conducting RI/FS activities at OU2 under their Formerly Utilized Sites Remedial Action Program (FUSRAP) as the Sylvania property was formerly utilized for the manufacture of federal government and commercial nuclear elements for reactors used in research and electric power generation.

Purpose

The purpose of this SOW is to describe the requirements for oversight of the remedial design of EPA's selected remedy for OU1, which will be developed by the PRPs. The primary objective of this work assignment for PRP oversight is to ensure the remedy as specified in the remedial design protects public health and the environment, and is implemented in compliance with the terms of the Record of Decision (ROD) dated September 30, 2013, and the Unilateral Administrative Order (Order) covering this remedial design. The requirements of this work assignment call for the contractor to observe and document whether the PRPs have complied with all applicable laws, regulations, and requirements, and have met all performance standards specified in the ROD and the Order for the remedial design.

The contractor will prepare a work plan and budget for this assignment to address Task 1 activities only. EPA is issuing a Unilateral Administrative Order (UAO) for Remedial Design Work, but there are concerns the PRPs will not comply. In the event the PRPs comply, a work assignment amendment will be issued directing the contactor to prepare a work plan and budget for the entire Statement of Work. If the PRPs do not comply, EPA will issue a new work assignment for the contractor to perform Remedial Design activities for this site.

General Requirements

The contractor shall furnish all necessary and appropriate personnel, materials, and services needed for performing and completing this oversight work assignment. EPA will monitor and oversee the contractor's activities throughout the development of the remedial design. EPA will also oversee the activities of the Settling Defendants' contractor throughout this project, to carry out its responsibilities to provide effective protection of the environment and public health and welfare.

EPA Primary Contact

The primary contact for this work assignment is Jennifer LaPoma, the Work Assignment Manager (WAM). She can be reached at (212) 637-4328 or by e-mail at lapoma.jennifer@epa.gov.

Green Remediation

"Green Remediation" is the practice of considering all environmental effects of the implementation of a remedy and incorporating options to maximize the net environmental benefit of cleanup actions. In accordance with EPA's strategic plan for compliance and environmental stewardship, the Agency strives for cleanup programs that use natural resources and energy efficiently, reduce negative impacts on the environment, minimize or eliminate pollution at its source, and reduce waste to the maximum extent possible. The EPA Region 2 Superfund program supports the adoption of "green site assessment and remediation," which is defined as the practice of considering all environmental impacts of studies, selecting and implementing a given remedy, and incorporating strategies to maximize the net environmental benefit of cleanup actions (see http://www.clu-in.org/greenremediation).

On March 17, 2009, Region 2 established a "Clean & Green" policy to enhance the environmental benefits of Superfund cleanups by promoting technologies and practices that are sustainable. This policy applies to all Superfund cleanup projects, and is available at http://www.epa.gov/region02/superfund/green_remediation/ policy.html. Region 2's "Clean and Green" policy calls for the contractor, at a minimum, to purchase 100 percent of the electricity for this project from renewable sources and use clean diesel fuels and technologies during the performance of this work assignment. Under this policy, certain green remediation technologies will serve as touchstones for Region 2 response actions. The Region 2 "touchstone technologies" include:

Use of 100% of electricity from renewable sources
http://www.epa.gov/osw/partnerships/c2p2/index.htm

Concrete made with Coal Combustion Products (CCP) replacing a portion of traditional cement
Clean diesel fuels and technologies
http://www.epa.gov/lmop/overview.htm - methane
Methane capture at landfill sites
http://apps3.eere.energy.gov/greenpower/buying/buying_power.shtml
http://www.epa.gov/oms/retrofit/nonroad-list.htm

To the extent practicable, the contractor shall explore and implement green remediation strategies and applications in the performance of the requirements of this work assignment to maximize sustainability, reduce energy and water usage, promote carbon neutrality, promote industrial materials reuse and recycling, and protect and preserve land resources. The contractor shall present green remediation options and approaches in its work plans, provide cost analyses for these options in its work plan budgets, maintain records of "green-related" activities, and report this information to EPA in its monthly progress reports, or as requested by the Project Officer.

The contractor can also refer to the following documents, checklists, and guidance to assist with understanding and implementing Green Remediation practices:

- **"Green Remediation Practices"** – Attachment 1
- **EPA Region 2 – "Green Site Assessment and Remediation Checklist Superfund Remedial Investigation/Feasibility Study Activities"** – Attachment 2
- **EPA Region 2 Clean and Green policy (March 2009, revised March 2012)** found at http://epa.gov/region2/superfund/green_remediation/gr_policy_signed.pdf
- **Remedial Action Contract (RAC) Toolkit – U.S. EPA OSWER Office of Superfund and Remediation Technology Innovation** found at http://www.clu-in.org/greenremediation/docs/RAC_Toolkit.pdf
- **Executive Order 13423** – Strengthening Federal Environmental, Energy, and Transportation Management (Jan 2007) found at http://www.epa.gov/oaintrnt/practices/eo13423.htm
- **Federal Acquisition Requirement, FAR Part 23** – Environment, Energy and Water Efficiency, Renewable Energy Technologies, Occupational Safety, and Drug-Free Workplace. (In particular, FAR 23.2, 23.4, and 23.7) found at http://www.arnet.gov/far/05-23-1/html/FARTOCP23.html

Laboratory Accreditation/Certification Requirements

All environmental and analytical laboratories used by the contractor under this work assignment must be currently certified or accredited for the matrices and analyses to be conducted. This certification or accreditation must be granted by one of the following accreditation programs: the National Environmental Laboratory Accreditation Program (NELAP); the American Association for Laboratory Accreditation (AALA); another organization that accredits environmental data operations to an international consensus standard and is acceptable to the U.S. Environmental Protection

Agency; or the subcontract laboratory is currently participating in the EPA Contract Laboratory Program. This certification or accreditation must be valid at the time of issuance of this work assignment, and the subcontract laboratory must maintain it through the duration of the work assignment period of performance.

If the subcontract laboratory's certification or accreditation is suspended or revoked at any time during the period of performance, the contractor must notify the EPA Project Officer immediately, in order to ensure that any potential effect on the performance of this work assignment is promptly and properly resolved.

Electronic Data Deliverable (EDD) Requirements

The contractor shall provide electronic submittal of field sampling and laboratory analytical results/data, well and sample location and elevation data and geologic/hydrogeologic data, in accordance with Region 2 policies, guidelines, and formats. The Region 2 Electronic Data Deliverable (EDD) is a standardized format for all of these types of submittals.

The Comprehensive Electronic Data Deliverable Specification Manual explains the systematic implementation of EDD within Region 2. The most recent EDD Guidance and Requirements can be found at: http://www.epa.gov/region02/superfund/medd.htm.

Record-Keeping Requirements

The contractor shall maintain all technical and financial records for this assignment in accordance with contract clause H.36 – Retention and Availability of Contractor Files. These technical and financial records must be in sufficient detail to support decisions made during the assignment as well as cost recovery actions. The contractor shall submit copies of all deliverables in electronic format (Word, Excel, and PDF) to the EPA.

Task 1 Project Planning and Support

1.1 Project Administration

The contractor shall provide the project administration and management support in the performance of this work assignment. For budgeting purposes, the contractor shall assume a 24 month period of performance.

1.2 Attend Scoping Meeting

The contractor shall contact the EPA WAM within five calendar days after receipt of the work assignment to schedule the scoping meeting. The contractor shall attend a scoping meeting to be held at the USEPA Region 2 Office in New York, NY. For budgeting purposes, it is anticipated that

two contractor personnel will attend the scoping meeting which will last approximately two hours. The contractor shall prepare and deliver scoping meeting minutes within five calendar days after conclusion of the scoping meeting.

1.3 Conduct Site Visit

The contractor shall conduct a 1-day site visit during the project planning phase to develop a conceptual understanding of the Site and the RD scope and requirements. For budgeting purposes, the contractor shall assume two (2) personnel will attend the site visit.

1.4 Develop Draft RD Oversight Work Plan and Cost Estimate

The Contractor shall prepare and submit a Work Plan in accordance with the contract terms and conditions. The Work Plan shall include a detailed description of the technical approach for the RD Oversight activities in accordance with the statement of work and shall specify the necessary procedures, inspections, deliverables, and schedules. In addition, the Work Plan shall include a comprehensive implementation management schedule for completion of each major activity and submittal.

The Work Plan shall also include the estimated cost to complete the work assignment/task order, including subcontractor costs, for each element of the SOW; providing a breakdown of the cost by task and subtask levels, in accordance with the contract WBS.

1.5 Negotiate and Prepare Final Work Plan and Budget

The contractor shall participate in a work plan negotiation meeting via tele-conference. The contractor shall submit a revised work plan and budget incorporating the agreements made in the negotiation meeting. The revised work plan shall include a summary of the negotiations. The contractor shall submit the revised work plan and budget in both hardcopy and electronic formats (e.g., Word .doc files and Excel spreadsheets).

1.6 Evaluate Existing Data and Documents

The contractor shall research and review available background information and documentation pertaining to the Site, including all studies and investigations performed at the Site, as provided or identified by the WAM. As part of this effort, the contractor shall evaluate the following documents:

- EPA files and records
- Files and records from the U.S. Geological Survey, Army Corps of Engineers, and other Federal sources
- Files and records from the NYSDEC, New York Department of Health, and other county and local sources.

1.7 Quality Assurance Project Plan

The contractor shall prepare the Quality Assurance Project Plans (QAPPs) for the Remedial Design Oversight (RDO) in accordance with the current the Uniform Federal Policy (UFP) for QAPP guidance and procedures and the contractor's EPA-approved quality management plan and quality assurance project plan for this contract. The UFP-QAPP shall be submitted as an Appendix to the work assignment Work Plan to facilitate document review and approval.

1.8 Health and Safety Plan

The contractor shall make use of the Health and Safety Plan (HASP) prepared by the PRP, as necessary, in order to cove· the requirements for conducting the field investigation oversight under this work assignment. The HASP shall cover current requirements for employee training, protective equipment, medical surveillance requirements, standard operating procedures, and a contingency plan, in accordance with 40 CFR 300.150 of the NCP and 29 CFR 1910.120 1(1) and (1)(2). This HASP shall describe the contractor's current health and safety protocols for all field activities.

1.9 Review PRP Plans

The contractor shall review, evaluate, and provide comments on the following PRPs planning technical documents:

PRP Work Plan
PRP QAPP and HASP

Information on any deficiencies or inconsistencies in the documents and recommended modifications to the documents to ensure compliance with USEPA's requirements shall be contained in said letter report. The report shall follow the general format as described below:

- Introduction/General Comments
- Specific Comments: Comments should be listed by section number, page number, and/or paragraph number and should identify inadequacies, technical flaws/errors, inconsistencies in the document and with the Amended ROD, scientific and engineering principles, National Contingency Plan, applicable federal, state, and local laws, regulations, and requirements, and/or EPA policies, directive letters, current RD and RA Handbook or other guidance documents, questionable procedures, etc.
- Recommendations: Comments should indicate corrective actions and methods to improve design, sampling procedures, data collection, and operational parameters

1.10 Meetings/Weekly Conference Calls

The contractor shall participate in technical meetings during the course of this work assignment. For budgeting purposes, the contractor shall assume that 4 meetings for the RD oversight project, lasting approximately 4 hours. The contractor shall assume 2 meetings in EPA offices and 2 meetings on site. The contractor shall prepare minutes of each meeting. The meeting minutes shall be submitted to EPA within 5 days after meeting.

The contractor shall lead and participate in weekly conference calls with EPA to discuss the activities and strategy associated with the execution of the RD. Each weekly conference call will include all personnel relevant to the issues discussed. Minutes will be recorded and transmitted by the contractor to the EPA WAM within 5 calendar days after each weekly call.

1.11 Subcontract Procurement

The contractor shall identify, solicit and award the subcontracts necessary to perform the requirements of the SOW. The contractor shall describe the subcontracts needed for this work assignment as part of its work plan and budget. All subcontract procurement activities shall be performed under this subtask.

1.12 Perform Subcontract Management

The contractor shall perform management and oversight of any subcontracts needed for performance of this work assignment. The contractor shall institute procedures to monitor progress and maintain systems and records to ensure that the work proceeds in accordance with the requirements of this work assignment and the contract. The contractor shall review and approve subcontractors' invoices and issue any necessary subcontract modifications.

Task 2 Community Relations

This task covers technical support provided by the contractor during public meetings and availability sessions conducted under this work assignment. The contractor shall provide community relations support to EPA throughout the RI/FS oversight in accordance with the *Superfund Community Involvement Handbook* (EPA 540-K-05-003, April 2005).

2.1 Community Interviews – ***Not Applicable***

2.2 Community Relations Plan - ***Not Applicable***

2.3 Public Meeting Support

The contractor shall perform the following activities in support of public meetings, availability sessions, and open houses under this work assignment:

- The contractor shall make arrangements for the public meetings/availability sessions, including the reservation of appropriate meeting space, as identified by EPA.

- The contractor shall attend the public meetings and the availability session. For budgeting purposes, the contractor shall assume that EPA will hold two (2) public meetings/availability sessions

- The contractor shall develop draft visual aids (i.e., transparencies, slides, and handouts). Assume that 20 overhead transparencies, 3 poster board size displays, and 100 handouts will be required for each public meeting. The contractor shall prepare final visual aids incorporating all EPA review comments.

- Reserve a court reporter for each public meeting. The contractor shall provide a full-page original and a "four on one" page copy, along with an electronic version of the transcripts, with additional copies placed in the information repositories by EPA.

- Prepare and maintain a sign-in sheet for each public meeting, per the direction of EPA. The contractor shall make use of the names provided on the sign-in to update the mailing list (see Subtask 2.8).

2.4 Fact Sheet Preparation

The contractor shall prepare draft fact sheets, in accordance with the approved community relations plan for this work assignment and the technical direction of the EPA WAM. For budgeting purposes, the contractor shall assume 3 fact sheets (2 fact sheet for each public meeting and 1 for a public availability session), 2 to 4 pages in length, with 4 illustrations per fact sheet. The contractor shall edit, layout, and color photocopy the fact sheets. The EPA WAM will review the fact sheets and EPA comments shall be incorporated in the final version. The contractor shall attach mailing labels to the final fact sheets before delivering them to EPA, from where they will be mailed.

2.5 Proposed Plan Support – ***Not Applicable***

2.6 Public Notices

The contractor shall prepare public notices/newspaper announcements in the most widely read local newspaper(s), in support of the public meetings. For budgeting purposes, the contractor

shall assume that three public notices/newspaper advertisements will be placed in support of the public meetings and/or public availability sessions conducted under this work assignment. The contractor shall budget for placement of two newspaper advertisements for each public notice, with each advertisement/public notice placed in both a large area-wide newspaper and a small local newspaper.

2.7 Information Repositories

The local repository will be the Westbury Public Library, 445 Jefferson Street, Westbury, New York. EPA anticipates that another local repository will be established for the Site.

The contractor shall update and maintain the local site information repository for the duration of the work assignment. The contractor shall assume two repository updates for two information repositories. The above repository will contain the Administrative Record for the Site. All reports shall be made available on electronic format for the Site repository.

2.8 Site Mailing List

The contractor shall update the mailing list used for community relations activities for this site. For budgeting purposes, the contractor shall assume that EPA's current mailing list will be initially updated and that there will be three additional updates, and that the mailing list will contain about 2,000 entries. The contractor shall provide a copy of the mailing list on a CD and mailing labels for each mailing. EPA will do the actual mailing of any information to the community.

Task 3 Field Oversight and Data Acquisition

This task covers the contractor's oversight of the PRP's work efforts and related field sampling during the PRP's performance of the RD. The plans describing requirements for collection of field data are described in Task 1. Data acquisition under this task starts with EPA's approval of the RD work plan and QAPP prior to initiation of RD field oversight activities, and ends with the demobilization of field personnel and equipment from the site after the PRP design investigation.

3.1 Mobilization and Demobilization Oversight

The contractor shall oversee the PRP's mobilization/demobilization effort. The contractor shall mobilize its personnel, equipment, and supplies necessary for field oversight activities at the site. Upon the PRP demobilization at the end of the field investigation, the contractor shall demobilize from the site. For budgeting purposes, the contractor shall assume that one mobilization and one demobilization will be required.

3.2 Remedial Design Field Oversight

The contractor shall implement procedures and perform activities necessary to ensure the proper management of PRP field investigation activities, including implementation and execution of accurate chain-of-custody procedures and other applicable requirements for sample tracking, protective sample packing, and proper sample-preservation. The contractor shall also ensure that the PRP's characterizes and disposes of investigation-derived wastes in accordance with local, State and Federal regulations as specified in the PRP's QAPP (see also the *Guide to Management of Investigation-Derived Wastes*, OSWER 9345.3-03FS, January 1992).

The contractor shall provide technical oversight of PRP activities to ensure the field investigation takes place in accordance with the EPA-approved work plan, quality assurance project plan, health and safety plan, and other applicable requirements. Oversight activities include observing and recording compliance with specific aspects of the RD work plan photographing certain field activities, maintaining a daily field logbook, and providing reports to the EPA. In addition, the contractor's field personnel shall attend any [progress meetings between the PRPs and/or the PRP's consultants and contractor(s), which may be located on-site. The contractor shall report any instance of the PRP non-conformance with these approved planning documents to the EPA. The contractor shall communicate with the EPA by telephone at least once per week during the PRP field work.

The contractor shall keep a field logbook to document the progress of the pre-remedial design field work. The logbook shall be marked "Enforcement Confidential" and shall be signed and dated at the end of each day of field activities by the contractor's field personnel. The contractor shall record the following information, at minimum, in the logbook each day during field work:

- Time, date, location and weather conditions
- Visual characterization/description of site conditions
- Listing of all on-site personnel (full name, position, and employer)
- Sample collection procedures and sample description
- Description of any issues, problems, inconsistencies or non-compliance by the PRP's contractor(s) with the approved RD work plan and protocols, including the QAPP and HASP

The contractor shall use the PRP RD work plan and schedule to determine the length of the PRP's field investigation and the specific needs for oversight of the PRP contractor. If the PRP's RD work plan and schedule have not been approved prior to the time for submittal of the contractor's draft work plan, the contractor shall assume that the PRP field investigations will take place over a period of 15 (fifteen) weeks (75 days).

3.2.2 Split sampling

The contractor shall collect approximately 10% of the split samples for analysis during RD. The contractor shall coordinate with and utilize the EPA's Contract Region Lab (CRL) wherever and whenever possible.

3.3 Prepare Field Investigation Oversight Periodic Reports

The contractor shall provide field oversight reports weekly for the duration of the PRP field work. The contractor's field oversight reports shall include a short summary of significant field events during the period, any deviations to the approved work plan during the period, photographic documentation, and a copy of all field logs. The contractor shall submit each field oversight report within two calendar days after each weekly period.

3.4 Prepare Final Field Investigation Oversight Summary Report

The contractor shall provide a summary field oversight report within thirty (30) calendar days after the end of all field activities. The final field oversight report shall include a summary of the oversight activities performed and reported by the contractor, photographs taken during the field work and a description of final oversight activities, including oversight of the PRP demobilization effort.

Task 4 Analysis of Split Samples

The contractor shall arrange for the analysis of environmental samples collected during Task 3. This task includes only the cost of the sample analysis. Efforts associated with sample collection is included in Task 3, efforts associated with shipment and validation are included in Task 5, and efforts associated with data evaluation are included in Task 6.

Task 5 Data Validation of Split Samples

The contractor shall arrange for the analysis and perform the validation of environmental split samples collected under Task 4. Sample validation under this task begins with the completion of the RD field sampling program and reservation of sample slots in the CLP (or procurement of the Non-RAS laboratory, as applicable), and ends with the contractor's validation of the analytical data received from the laboratory. The contractor shall perform the following activities under this task:

5.1 Prepare and Ship Environmental Samples

The contractor shall collect, prepare, and ship environmental samples collected under Task 3 in accordance with the approved QAPP prepared under Task 1.

5.2 Sample Management/Coordination with the Appropriate Sample Management Personnel

The contractor shall coordinate with appropriate sample management personnel (Sample Management Office (SMO), the Regional Sample Control Coordinator (RSCC), and/or the Environmental Services Division (ESD)) regarding analytical, data validation, and quality assurance issues.

5.3 Data Validation

The contractor shall validate the data to ensure that the data and chain-of-custody procedures are accurate and defensible. The contractor shall perform the following activities under this subtask:

- Review analysis results against validation criteria
- Review the data and make a data usability determination
- Complete the necessary summary tables, validation worksheets, and DQO summary forms
- The contractor shall develop and submit a Data Validation Report to the WAM within **21 (twenty one) calendar days** after all of the last analytical data have been validated.

Task 6 Data Evaluation of Sample Analysis

This task covers compilation and comparison of the PRP-generated data that will be used in the OU1 RD with data resulting from the analysis of split samples. The contractor shall compare, evaluate, interpret, and tabulate data in an appropriate presentation format for final data tables. The contractor shall prepare an environmental database that includes historical data as well as data collected as part of the RD. The environmental database will have the capability of sorting the data in order to perform a detailed comparison of the various types of sampling data collected as part of the environmental investigations performed at the site.

6.1 Data Usability Evaluation and Field QA/QC

The contractor shall evaluate the usability of the historical sample data, PRP-generated data, as well as the data acquired as part of this assignment, including any uncertainties associated with the data, and apply the appropriate QA/QC protocols to evaluate whether such data are appropriate for their intended use.

6.2 Data Reduction, Tabulation, and Evaluation

The contractor shall evaluate, interpret, and tabulate data in an appropriate presentation format for final data tables. The following shall be used as general guidelines in the preparation of data for subsequent evaluation/interpretation:

- Tables of analytical results should be organized in a logical manner such as by sample location number, sampling zone, or some other logical format. Groundwater analytical results shall be separated into groups based on the hydrogeologic framework such as shallow aquifer upgradient, deep aquifer upgradient, shallow aquifer downgradient and deep aquifer downgradient. Well identification numbers within each set could be ordered according to whatever alpha-numeric system is used for the well identification numbers. Surface/subsurface soil analyses shall be separated according to site location or specific contaminant source and background areas. The contractor shall coordinate the table organization with the EPA.

- Analytical results shall not be organized by laboratory identification numbers because these numbers do not correspond those used on sample location maps. The sample location/well identification number shall always be used as the primary reference for the analytical results. The sample location number shall also be indicated if the laboratory sample identification number is used.

- Analytical tables should indicate the sample collection dates.

- The detection limit shall be indicated in instances where a parameter was not detected.

- Analytical results shall be reported in the text, tables and figures using a consistent convention such as ug/L for groundwater analyses and mg/kg for soil analyses.

- The lead agency's protocol for eliminating field sample analytical results based on laboratory/field blank contamination results shall be clearly explained.

- Discussion of approved sampling results shall not be qualified by suggesting that a particular chemical is a common lab contaminant or was detected in the lab blank. If the reported result has passed QA/QC it shall be considered valid. In cases where the chemical in question was known to have been used and/or disposed of on site, positively identified at high levels in other environmental media, and passes QA/QC protocols, the sampling results shall not be questioned as being due to laboratory contaminants.

- Field equipment rinsate blank analyses results shall be discussed in detail if decontamination solvents are believed to have contaminated field samples.

- The deliverable from this task shall be an environmental database that integrates both historic sampling data with the sampling data obtained by the contractor and PRP as a result of the OU1 RD.

6.3 Modeling Oversight

The contractor shall provide technical support to EPA with regards to determining the necessity for modeling efforts undertaken by the PRP in support of RD activities. The contractor shall provide support and recommendations to EPA on the need for modeling to complete and accurate depiction of the nature and extent of contamination, distribution and movement of site contamination. The contractor shall assume modeling support as part of the work plan budget for this subtask. If modeling is undertaken by the PRPs, the contractor shall provide technical support, which shall include review and comments on modeling specific memorandums and outputs. The contractor shall assume modeling support as part of the work plan budget for this subtask.

6.4 Technical Memorandum (Data Evaluation Report)

The contractor shall provide a technical memorandum to the EPA summarizing the results of this evaluation (under Task 6). The report will include a presentation and discussion of the split sample analytical results, a comparison of the split sample data with the PRP's data, and a discussion of any discrepancies. Upon receipt of final analytical results from laboratory, the contractor shall provide EPA with a draft Data Evaluation Technical Memorandum within 45 days.

Task 7 Review of PRP Remedial Design Documents

This task covers requirements for review and comment on the PRP's remedial design submittals. The contractor shall perform reviews evaluating the technical and engineering merit of the PRP documents. After receipt of each PRP submittal, the contractor shall submit a report summarizing the results of its review, identifying specific issues of concern and describing recommended corrective actions. The documents to be evaluated under this task comprise the Pre-Design Investigation and Remedial Design Work Plans, the Pre-Design Investigation Memorandum, the preliminary and final remedial design reports (including all appendices), and the remedial action drawings, plans and specifications. In reviewing these submittals, the contractor shall evaluate whether each submittal satisfies the requirements of the following documents and policies:

- Record of Decision and Order for the remedial design
- Compliance with ARARs
- Standard professional engineering practices
- Applicable statutes, EPA policies, directives and regulations

7.1 Review PRP Remedial Design Documents

The contractor shall review the PRP's remedial design draft and final reports, including all appendices, and the remedial design plans and specifications. This review shall cover all documents to be submitted by the PRPs in accordance with the Order and associated Remedial Design statement of work. The contractor shall evaluate the PRP's draft and final design reports (including all appendices) and the remedial design plans and specifications to assess whether these documents satisfy the requirements of the Record of Decision, Order, and other documents listed above, as well as to assess whether the construction schedule will meet the completion goals for this remedial action. In its review of the PRP's remedial design documents, the contractor shall evaluate the specific technical and engineering aspects of the detailed design-related submittals, identify specific issues and problems, and describe suggested revisions and/or corrective actions. The PRP documents, draft and final, to be reviewed under this subtask are as follows:

- Plans and schedules for RD and RA implementation
- "Green" strategy for implementation of RD/RA
- Construction Quality Assurance Project Plan
- Remedial Design Reports (35%, 65%, 95%, Final)

The contractor shall provide its review comments on the PRP's document identified in Section 7 (including all supplemental documents), plans and specifications, including all appendices, within 30 days of receipt of each document.

Task 8 Technical Meeting Support

This task covers technical support activities for meetings between EPA, the PRPs, and the PRP's contractors. The contractor shall attend meetings during the performance of this work assignment, in addition to the meetings specifically addressed under other subtasks in this statement of work, and document the proceedings and results of these meetings. These meetings may be scheduled to coincide with specific milestones during the remedial design.

8.1 Technical Meeting Support

For budgeting purposes, the contractor shall assume that EPA will hold three meeting with the PRPs and project stakeholders at the EPA Region 2 New York office. It is anticipated that 3 contractor personnel will attend this meeting, and that the meeting will last approximately 3 hours. The contractor shall submit minutes of this meeting for review by the EPA within 5 calendar days after the meeting.

Task 9 Work Assignment Closeout

Upon notification from EPA that the technical work under the work assignment is complete, the contractor shall perform the activities necessary to close out this work assignment in accordance with contract requirements. After WA closeout activities have been completed, the contractor shall retain its WA files in accordance with Clause H.36, "Retention and Availability of Contractor Files," of the Contract.

9.1 Revised Work Plan Budget

As part of work assignment closeout, the contractor shall provide a revised work plan budget with the actual costs incurred and an estimate to complete the closeout activities. The revised work plan budget shall be submitted to EPA within 30 days of closeout direction.

9.2 Document Indexing

At the conclusion of this work assignment, the contractor shall organize the work assignment files in its possession and provide the index to the Project Officer. The index shall be submitted with the long-term storage submittal required under Task 9.3. At a minimum, the index shall contain the following information:

- Project name and work assignment number (in a heading on top of the list).
- Document date (the documents indexed shall be sorted chronologically by date, beginning to end), description /subject of document, who sent the document and who received the document.

The documents to be indexed shall include all final deliverables, work assignment amendments, and working files that may need to be accessed to provide information on why certain technical decisions were made.

9.3 Document Retention/Conversion

The contractors shall convert all relevant paper files into long-term storage electronic format, CDs or DVDs. The media shall then be delivered to the Project Officer within 45 days of approval of the revised work plan budget.

Summary of Major Submittals for RI/FS Oversight
New Cassel/Hicksville Ground Water Contamination Superfund Site OU1

TASK	DELIVERABLE	Number of Copies	DUE DATE (calendar days)
1.2	Scoping Meeting Minutes	1E, 3H*	5 days after scoping meeting
1.4	Draft Remedial Design Oversight Work Plan and Draft Budget	1E, 3H*	30 days after scoping meeting
1.5	Final Remedial Design Oversight Work Plan and Budget	1E, 3H*	15 days after conclusion of negotiations
1.7	Quality Assurance Project Plan	1E	21 days after work plan approval
1.8	Health and Safety Plan	1E	21 days after work plan approval
1.9	Review of Quality Assurance Project Plan (QAPP)	1E	30 days after receipt of PRP RI/FS Work Plan
1.9	Review of Revised QAPP	1E	15 days after receipt of EPA comments on Draft QAPP
1.9	Review of Health and Safety Plan (HASP)	1E	30 days after receipt of RI/FS Work Plan
1.9	Review of Revised HASP	1E	15 days after receipt of EPA comments on draft HASP
1.10	Meeting Minutes	1E	5 days after each meeting
3.3	Field Investigation Oversight Weekly Reports	1E	2 days after each weekly period
3.4	Field Investigation Oversight Final Summary Report	1E, 1H	30 days from completion of all field activities
6.1	Data Usability Report	1E, 1H	21 days after receipt of final analytical results from laboratory
6.4	Data Evaluation Report	1E, 1H	45 days from receipt of final analytical results from laboratory
7.1	Review of PRP's Draft Pre-Design Investigation Work Plan	1E	30 days after receipt of PRP's Draft Work Plan

TASK	DELIVERABLE	Number of Copies	DUE DATE (calendar days)
7.1	Review of PRP's Final Pre-Design Investigation Work Plan	1E	20 days after receipt of PRP's Final Work Plan
7.1	Review of PRP's Draft Pre-Design Investigation Memorandum	1E	30 days after receipt of PRP's Draft Memorandum
7.1	Review of PRP's Final Pre-Design Investigation Memorandum	1E	20 days after receipt of PRP's Final Memorandum
7.1	Review of PRP's Draft Remedial Design Work Plan	1E	30 days after receipt of PRP's Draft Work Plan
7.1	Review of PRP's Final Remedial Design Work Plan	1E	20 days after receipt of PRP's Final Work Plan
7.1	Review of PRP's 35% Remedial Design Report	1E	30 days after receipt of PRP Report
7.1	Review of PRP's 65% Remedial Design Report	1E	30 days after receipt of PRP Report
7.1	Review of PRP's 95% Remedial Design Report	1E	30 days after receipt of PRP Report
7.1	Review of PRP's Final Remedial Design Report	1E	20 days after receipt of PRP Report
9.3	Document Retention/.Conversion	1E	Within 60 days of EPA notification of WA completion

Note: "E" is electronic copy whereas "H" is hardcopy -All deliverable copies will be submitted to the WAM unless otherwise directed by EPA. An electronic copy of all documents will be submitted to EPA.

* One copy of the deliverable will be submitted to the PO and CO; the remainder will be submitted to the WAM.